**CLINICAL AND PATHOGENETIC SIGNIFICANCE OF HEAT SHOCK PROTEIN IN ALOPECIA AREATA**

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| **About the author:** | I.M. Serbina |
| **Heading** | ORIGINAL RESEARCHES |
| **Type of article** | Scentific article |
| **Annotation** | Heat shock protein 70 (HSP‑70) performs a variety of functions, serving as a participant in the pathogenesis of a number of autoimmune diseases. Absence of unambiguous data on immunopathological processes, search for new markers of inflammation substantiate.The objective of the work: to evaluate the content of HSP‑70 in patients with alopecia areata (АA), depending on the severity, activity and duration of the disease.Materials and methods. We observed 68 patients with different forms of AA (32 males and 36 females). The control group consisted of 35 healthy individuals. The severity and stage of the pathological process were evaluated.Results. The content of HSP‑70 (ng / ml) was determined in blood serum by the method of enzyme‑linked immunosorbent assay.The level of HSP‑70 in patients with AA was significantly increased compared with the data obtained in the control group. A correlation was found between the content of HSP‑70 and the severity of dermatosis, when there was an increase in the value of the indicator in all options of the course of the disease, especially in the severe stage of the disease – 1.9 times higher than in the control group.HSP‑70 increased by 2.2 times compared with patients with inactive manifestations of AA. The most pronounced violations of the investigated indicator were found in patients who had signs of activity and a severe degree of AA. An increase in HSP‑70 was identified in all periods of the disease, but the highest level was observed in patients with disease duration of up to 1 year. It is established that an increase in the secretion of HSP‑70 (η2 = 66.2%) increases the probability of development of AA.Conclusions. The revealed violations can create conditions for the development of autoimmune inflammation and indicate the direct involvement of HSP‑70 in the mechanisms of AA pathogenesis. |
| **Tags** | alopecia areata, pathogenesis, heat shock protein 70. |
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